

Serial No. 10/044,276Docket No.: 55476US004**Amendments to the Claims**

A detailed list of all claims under examination is set out below. Please amend claims 26 and 42 – 44 as shown below in marked form:

1. (withdrawn): A device comprising:
 - a) a rotating support having a surface, the surface at least partially covered with a removable substrate of limited length;
 - b) at least one pick-and-place roll that is nipped against the substrate on the support and whose period of rotation is not equal to the period of rotation of the support;
 - c) a coating applicator for applying a quantity of coating liquid to the substrate or to the pick-and-place roll; and
 - d) a motion device that rotates the support and substrate for a plurality of revolutions whereby wetted surface portions of the pick-and-place roll repeatedly contact the substrate.
2. (withdrawn): A device according to claim 1 comprising at least two pick-and-place rolls.
3. (withdrawn): A device according to claim 2 wherein the pick-and-place rolls do not have the same period of rotation.
4. (withdrawn): A device according to claim 2 wherein the pick-and-place rolls have the same period of rotation.
5. (withdrawn): A device according to claim 1 wherein the period of rotation of a pick-and-place roll can be dynamically changed during operation of the device to reduce or minimize coating defects.
6. (withdrawn): A device according to claim 1 wherein a pick-and-place roll can be operated at a fixed or variable surface speed differential relative to the surface speed of the support.

Serial No. 10/044,276Docket No.: 55476US004

7. (withdrawn): A device according to claim 6 wherein the surface speed differential can be varied sinusoidally as the support is revolved.
8. (withdrawn): A device according to claim 1 wherein a pick-and-place roll has a period of rotation that is not periodically related to the period of rotation of the substrate.
9. (withdrawn): A device according to claim 8 wherein a period of rotation of the support or of a pick-and-place roll can be varied during operation of the device to reduce or minimize coating defects.
10. (withdrawn): A device according to claim 1 wherein the size or position of the support or of a pick-and-place roll can be varied during operation of the device to reduce or minimize coating defects.
11. (withdrawn): A device according to claim 1 wherein a pick-and-place roll has a dimensionless roll size between 0.02 to 0.195, 0.255 to 0.28, 0.34 to 0.36 and 0.44 to 0.48.
12. (withdrawn): A device according to claim 1 wherein the coating applicator applies a discontinuous coating.
13. (withdrawn): A device according to claim 1 wherein the coating applicator applies the coating as a pattern of stripes.
14. (withdrawn): A device according to claim 13 wherein the pattern has a dimensionless stripe width less than about 0.2.
15. (withdrawn): A device according to claim 13 wherein the pattern has a dimensionless stripe width between about 0.05 and about 0.15.
16. (withdrawn): A device according to claim 1 wherein the coating applicator applies the coating as a pattern of drops.
17. (withdrawn): A device according to claim 16 wherein the pattern is discontinuous.

Serial No. 10/044,276

Docket No.: 55476US004

18. (withdrawn): A device according to claim 1 wherein the device converts a discontinuous coating to a continuous, void-free coating.
19. (withdrawn): A device according to claim 18 wherein the converted coating has a dimensionless minimum caliper greater than about 0.9.
20. (original): A method comprising:
- a) providing a rotating support having a surface, the surface at least partially covered with a removable substrate of limited length and, in either order:
 - i) nipping the substrate between the support and at least one pick-and-place roll whose period of rotation is not equal to the period of rotation of the support; and
 - ii) applying a quantity of coating liquid to the substrate or to the pick-and-place roll; and
 - b) rotating the support and substrate for a plurality of revolutions whereby wetted surface portions of the pick-and-place roll repeatedly contact the substrate.
21. (original): A method according to claim 20 comprising at least two pick-and-place rolls.
22. (original): A method according to claim 21 wherein the pick-and-place rolls do not have the same period of rotation.
23. (original): A method according to claim 21 wherein the pick-and-place rolls have the same period of rotation.
24. (original): A method according to claim 20 wherein the period of rotation of a pick-and-place roll can be dynamically changed to reduce or minimize coating defects.
25. (original): A method according to claim 20 wherein a pick-and-place roll can be operated at a fixed or variable surface speed differential relative to the surface speed of the support.
26. (currently amended): A method ~~according to claim 25~~ comprising:

Serial No. 10/044,276Docket No.: 55476US004

- a) providing a rotating support having a surface, the surface at least partially covered with a removable substrate of limited length and, in either order:
- i) nipping the substrate between the support and at least one pick-and-place roll whose period of rotation is not equal to the period of rotation of the support; and
- ii) applying a quantity of coating liquid to the substrate or to the pick-and-place roll; and
- b) rotating the support and substrate for a plurality of revolutions whereby wetted surface portions of the pick-and-place roll repeatedly contact the substrate,

wherein a pick-and-place roll can be operated at a variable surface speed differential relative to the surface speed of the support and the surface speed differential can be is varied sinusoidally as the support is revolved.

27. (original): A method according to claim 20 wherein a pick-and-place roll has a period of rotation that is not periodically related to the period of rotation of the substrate.
28. (original): A method according to claim 27 wherein a period of rotation of the support or of a pick-and-place roll can be varied during operation of the device to reduce or minimize coating defects.
29. (original): A method according to claim 20 wherein the size or position of the support or of a pick-and-place roll can be varied to reduce or minimize coating defects.
30. (original): A method according to claim 20 wherein a pick-and-place roll has a dimensionless roll size between 0.02 to 0.195, 0.255 to 0.28, 0.34 to 0.36 and 0.44 to 0.48.
31. (original): A method according to claim 20 wherein the applied coating is discontinuous.

Serial No. 10/044,276Docket No.: 55476US004

32. (original): A method according to claim 20 wherein the applied coating is a pattern of stripes.
33. (original): A method according to claim 32 wherein the pattern has a dimensionless stripe width less than about 0.2.
34. (original): A method according to claim 32 wherein the pattern has a dimensionless stripe width between about 0.05 and about 0.15.
35. (original): A method according to claim 20 wherein the applied coating is a pattern of drops.
36. (original): A method according to claim 35 wherein the pattern is discontinuous.
37. (original): A method according to claim 20 wherein the applied coating is converted to a continuous, void-free coating.
38. (original): A method according to claim 37 wherein the converted coating has a dimensionless minimum caliper greater than about 0.9.
39. (original): A method according to claim 20 wherein the applied coating is converted to a void-free coating having an average caliper less than 5 micrometers.
40. (original): A method according to claim 20 wherein the applied coating is converted to a void-free coating having an average caliper less than 1 micrometer.
41. (original): A method according to claim 20 wherein the applied coating is converted to a void-free coating having an average caliper less than 0.5 micrometers.
42. (currently amended): A method according to claim 20 wherein the dimensionless stripe width and dimensionless roll size ~~are within a white region depicted in Fig. 4~~ provide a dimensionless minimum coating caliper of 0.9 to 1.0.
43. (currently amended): A method according to claim 20 wherein there are at least two pick-and-place rolls and the dimensionless stripe width and dimensionless roll

Serial No. 10/044,276Docket No.: 55476US004

size ~~are within a white region depicted in Fig. 11~~ provide a dimensionless minimum coating caliper of 0.9 to 1.0.

44. (currently amended): A method according to claim 20 wherein there are at least two pick-and-place rolls and the dimensionless stripe width and dimensionless roll size ~~are within a white region depicted in Fig. 12~~ provide a dimensionless minimum coating caliper of 0.9 to 1.0.